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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,433	10/31/2003	Thomas Arend	08516.0005	7747

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EXAMINER

COUGHLAN, PETER D

ART UNIT

PAPER NUMBER

2129

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/697,433

Applicant(s)

AREND, THOMAS

Examiner

Peter Coughlan

Art Unit

2129

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/2/2004</u> | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

1. Claims 1-14 are pending in this application.

35 USC § 101

2. Claims 1-14 are rejected under 35 U.S.C. 101 for nonstatutory subject matter. The computer system must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77. The invention is ineligible because it has not been limited to a substantial practical application. A solution that is forwarded through a service module to the main system is useless in a real world situation.

In determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result achieved by the claimed invention is "useful, tangible and concrete." If the claim is directed to a practical application of the § 101 judicial exception producing a result tied to the physical world that does not preempt the judicial exception, then the claim meets the statutory requirement of 35 U.S.C. § 101.

The phrase 'in cooperation with a human user', is not clear in its purpose or scope. There has to be an interface between the real world and main system for a practical application to be achieved. The phrase "forwarding the solutions through the service module to the main system" does not call for outputting data to a user nor does it call for actually using the solutions.

Art Unit: 2129

The invention must be for a practical application and either:

- 1) specify transforming (physical thing) or
- 2) have the FINAL RESULT (not the steps) achieve or produce a
useful (specific, substantial, AND credible),
concrete (substantially repeatable/ non-unpredictable), AND
tangible (real world/ non-abstract) result.

A claim that is so broad that it reads on both statutory and non-statutory subject matter, must be amended, and if the specification discloses a practical application but the claim is broader than the disclosure such that it does not require the practical application, then the claim must be amended.

A claim that recites a computer that solely calculates a mathematical formula is not statutory.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5-7, 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by August (U.S. 6,647,383).

Claims 1 and 7.

Art Unit: 2129

August anticipates the main system: a database (**August**, C7:14-37), an application server (**August**, C9:24-48; 'Application server' of applicant is equivalent to 'search application system' of August) and a front-end server (**August**, C27:17-32) and in the service system: a service module to collect problem related data from the main system (**August**, C9:55-66; 'Service module' of applicant is equivalent to 'server back-end' of August.), an acquisition module to acquire knowledge representations(**August**, C9:66 through C10:27; 'Acquire knowledge' of applicant is preformed by 'learning engine' of August.), a knowledge module to store the knowledge representations (**August**, C9:66 through C10:27; 'store the knowledge representations' of applicant is preformed by 'learning engine' of August.), and an inference module for processing problem related data with knowledge representations to identify solutions (**August**, C19:50 through C20:13; 'inference module' of applicant is equivalent to 'smart search engine' of August.), the inference module forwarding the solutions through the service module to the main system. (**August**, C19:50 through C20:13; In FIG #1 the 'smart search engine' forwards solutions through interfaces 26, 24 and 22 to the internet.)

Claim 3.

August anticipates the service module (**August**, 'server back-end') monitors the application server (**August**, 'search application server') and the database (**August**, FIG#1, 42, 46, 48, 50, 52, 58 and 62) according to instructions from the inference module. (**August**, 'smart search engine'; In

Art Unit: 2129

FIG#1, the 'server back-end' encompasses the 'smart search engine' and 'search application system'. The 'server back-end' is adjacently linked to the databases, thus monitoring all three modules.)

Claim 5.

August anticipates the service system, the inference module (**August**, C9:66 through C10:27; 'Inference module' of applicant is equivalent to 'smart search engine' of August.) is adapted to process problem (**August**, C9:66 through C10:27; 'Process problem' of applicant is equivalent to 'identify' of August.) related data with knowledge representations to identify solutions (**August**, C9:66 through C10:27; 'Identify solutions' of applicant is equivalent to 'locating' of August.) and to return solutions (**August**, C9:66 through C10:27; 'Return solutions' of applicant is equivalent to 'retrieving' of August.) to the main system, wherein the service system returns solutions that solve the problem directly in the main system. (**August**, C9:66 through C10:27; 'Directly' of applicant is equivalent to 'information database'. Directly meaning information that was already at hand and no input from an 'expert' was needed for further search.)

Claim 6.

August anticipates the service system, the inference module (**August**, C9:66 through C10:27; 'Inference module' of applicant is equivalent to 'smart search engine' of August.) is adapted to process problem (**August**, C9:66

Art Unit: 2129

through C10:27; 'Process problem' of applicant is equivalent to 'identify' of August.) related data with knowledge representations to identify solutions (**August**, C9:66 through C10:27; 'Identify solutions' of applicant is equivalent to 'locating' of August.) and to return solutions (**August**, C9:66 through C10:27; 'Return solutions' of applicant is equivalent to 'retrieving' of August.) to the main system, wherein the service system returns solutions that solve the problem indirectly by being further knowledge representations for a further inference module operating for the main system. (**August**, C9:66 through C10:27; 'Indirectly' of applicant is equivalent to 'expert knowledge database'. Indirectly meaning information that was not initially present at system start and learning engine generated a solution caused by further knowledge representations and further inference module.)

Claim 9.

August anticipates the service system forwards problem data and solutions for further analysis by a human technician. (**August**, C9:66 through C10:27; 'Forwards problem data and solutions' and 'human technician' of applicant is equivalent to 'DB administration' and 'administrator' of August.)

Claim 10.

August anticipates the service system forwards problem data and solutions to the further computer in a format that allows analysis by an expert

Art Unit: 2129

system in the further computer. (**August**, C9:49-54 and C13:52-60; 'Expert system' of applicant is equivalent to 'smart search system' of August.)

Claim 11.

August anticipates program code means for performing all the steps of anyone of the claims 7-10 when the computer program product is run on a computer. (**August**, C19:50 through C20:13)

Claim 12

August anticipates an inference module with expertise functionality for evaluating problems (**August**, C19:50 through C20:13; 'inference module' of applicant is equivalent to 'smart search engine' of August.) in a main computer system that executes an application, (**August**, C19:50 through C20:13) the inference module is adapted to process problem related data with knowledge representations to identify solutions, (**August**, C9:66 through C10:27; 'Process problem' of applicant is equivalent to 'identify' of August.) the inference module characterized in that the inference module is part of a service system receiving problem related data from the main computer system over a network and returning solutions to the main system, (**August**, FIG#1; 'Inference module' of applicant is equivalent to 'smart search engine' of August. The 'smart search engine' is within the service system which is separated from a main computer system by the internet.) wherein in a first case, the service system returns solutions that solve the problem directly and, (**August**, C9:66

Art Unit: 2129

through C10:27; 'Directly' of applicant is equivalent to 'information database'.

Directly meaning information that was already at hand and no input from an 'expert' was needed for further search.) in a second case, the service system returns solutions that solve the problem indirectly by being further knowledge representations for a further inference module. (**August**, C9:66 through C10:27; 'Indirectly' of applicant is equivalent to 'expert knowledge database'. Indirectly meaning information that was not initially present at system start and learning engine generated a solution caused by further knowledge representations and further inference module.)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over August, as set forth above, in view of Babutzka (U. S. Patent Publication 20020073200) .

Claim 2.

Art Unit: 2129

August fails to particularly call for the main system and the service system communicate through remote function call connections provided by the service module.

Babutzka teaches the main system and the service system communicate through remote function call connections provided by the service module.

(**Babutzka**, ¶0099) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of August by using a system that can contact remote modules as taught by Babutzka to have the main system and the service system communicate through remote function call connections provided by the service module.

For the purpose of providing connections with other modules thus increasing flexibility in design.

Claim 4

August fails to particularly call for the main system and the service system are systems in client/server configuration.

Babutzka teaches the main system and the service system are systems in client/server configuration. (**Babutzka**, ¶0097) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of August by utilizing a standard client server configuration as taught by Babutzka to have the main system and the service system are systems in client/server configuration.

Art Unit: 2129

For the purpose of having the client/server configuration in place allows multiple users to access the system at multiple sites.

Claim 14.

August fails to particularly call for the main system is implemented as a R/3 system.

Babutzka teaches the main system is implemented as a R/3 system.

(**Babutzka**, ¶0009) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of August by using an integrated business system as taught by Babutzka to have the main system is implemented as a R/3 system.

For the purpose of using an industrial standard integrated business system promotes better integration with employees, hardware and software.

Claim Rejections - 35 USC § 103

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of August, and Babutzka, as set forth above, and further in view of Schoneburg (U. S. Patent Publication 20020133347), and Hennessey (U. S. Patent 6360216).

Claim 8.

However, the combination of August and Bautzka fails to particularly call for identifying the solutions form set of predefined advices of the application, identify the solutions by applying knowledge representations in a sequential

Art Unit: 2129

order, identify the solutions by applying knowledge representations in a hierarchical order, identify the solutions by applying knowledge representations in a dynamically adaptive order, communicate questions to the user by composing the questions from predefined passages provided by the application, and analyses responses that the user enters in natural language.

Schoneburg teaches identify the solutions form set of predefined advices of the application, (**Schoneburg**, ¶0075; 'predefined advices' of applicant is equivalent to 'parameters' of Schoneburg.) identify the solutions by applying knowledge representations in a sequential order. (**Schoneburg**, ¶0007; "Sequential order' of applicant is equivalent to 'sequential calling' of Schoneburg.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the combination of August and Bautzka by using parameters for search aids and putting the solutions in sequential order as taught by Schoneburg to identify the solutions form set of predefined advices of the application, identify the solutions by applying knowledge representations in a sequential order.

For the purpose of being able to retrieve solutions and put them into a useful best answer first sequence.

Hennessey teaches identify the solutions by applying knowledge representations in a hierarchical order (**Hennessey**, C12:37-50), identify the solutions by applying knowledge representations in a dynamically adaptive order (**Hennessey**, C9:6-26), communicate questions to the user by composing the questions from predefined passages provided by the application (**Hennessey**,

Art Unit: 2129

abstract; 'Predefined passages' of applicant is equivalent to 'text information from the database' of Hennessey.), and analyses responses that the user enters in natural language. (**Hennessey**, C2:17-24; 'Natural language' of applicant is equivalent to 'his or her own words' of Hennessey.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the combined teachings of August, Bautzka and Hennessey by placing solutions into a hierarchical or dynamic order with aid from the system in the user's own words as taught by Hennessey to identify the solutions by applying knowledge representations in a hierarchical order, identify the solutions by applying knowledge representations in a dynamically adaptive order, communicate questions to the user by composing the questions from predefined passages provided by the application, and analyses responses that the user enters in natural language.

For the purpose of the user having the choice of how solutions are presented and not have to learn the system language for ease of use.

Claim Rejections - 35 USC § 103

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of August, Babutzka, Schoneburg, Hennessey, as set forth above, and further in view of Fujinaga (U. S. Patent Publication 20010056379)

Claim 13.

Art Unit: 2129

However, the combination of August, Babutzka, Schoneburg and Hennessey does not teach the main system executes an enterprise resource planning application.

Fujinaga teaches the main system executes an enterprise resource planning application. (**Fujinaga**, ¶0014 and ¶0109). It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the combined teachings of August, Babutzka, Schoneburg and Hennessey by identifying computer problems and attributes as taught by Fujinaga to have the main system executes an enterprise resource planning application.

For the purpose of using the system to operate within all fields of an enterprise.

Conclusion

5. The prior art of record and not relied upon is considered pertinent to the applicant's disclosure.

-U. S. Patent Publication 20020165724: Blankestijn

-U. S. Patent Publication 20020095399: Devine

-U. S. Patent 6463470: Mohaban

-U. S. Patent Publication 20020198858: Stanley

-U. S. Patent Publication 20020069134: Soloman

-U. S. Patent 6173347: Emmerich

-U. S. Patent 6105016: Martin

Art Unit: 2129

-U. S. Patent 5896510: Kanayama

-U. S. Patent Publication 20020002603: Vange

6. Claims 1-14 are rejected.

Correspondence Information

7. Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner Peter Coughlan, whose telephone number is (571) 272-5990. The Examiner can be reached on Monday through Friday from 7:15 a.m. to 3:45 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor David Vincent can be reached at (571) 272-3687. Any response to this office action should be mailed to:

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Art Unit: 2129

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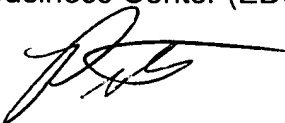
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(located on the first floor of the south side of the Randolph Building);

or faxed to:

(571) 273-8300 (for formal communications intended for entry.)

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).



Peter Coughlan

2/8/2006



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